

R309-400. Water System Rating Criteria.

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R309-400. Water System Rating Criteria.

R309-400-1. Authority.

Under authority of Utah Code Annotated, Section 19-4-104, the Drinking Water Board adopts this rule in order to evaluate a public water system's standard of operation and service delivered in compliance with R309-100 through R309-705 hereinafter referred to as Rules.

R309-400-2. Extent of Coverage.

This rule shall apply to all public water systems as defined in R309-100.

R309-400-3. Definitions.

Definitions for certain terms used in this rule are given in R309-110 but may be further clarified herein.

Corrective Action Plan - an agreement between the Division of Drinking Water and a public drinking water system establishing conditions and timelines for addressing significant deficiencies or E. coli contamination of a drinking water source.

Treatment Technique - A required process intended to reduce the level of a contaminant in drinking water.

Treatment Technique Violation - failure to correct significant deficiencies, address E. coli positive source contamination or adhere to specific terms of a Corrective Action Plan.

R309-400-4. Water System Ratings.

(1) The Director shall assign a rating to each public water system in order to provide a concise indication of its condition and performance. This rating shall be assigned based on the evaluation of the operation and performance of the water system in accordance with the requirements of the Rules. Points shall be assessed to water systems for each violation of these requirements (R309-100 through R309-705) as the requirements apply to each individual water system. The number of points that shall be assessed is outlined in the following sections of this rule. The number of points represents the threat to the quality of the water and thereby public health.

(2) Points are assessed in the following categories: Quality, Monitoring and Public Notification; Physical Deficiencies; Operator Certification; Cross Connection Control; Drinking Water Source Protection; Administrative Issues; and, Reporting and Record

Maintenance.

(3) Based upon the accumulation of points, the public water system shall be assigned one of the following ratings:

(a) Approved - In order to qualify for an Approved rating, the public water system must maintain a point total less than the following:

(i) Community water system - 150 points;

(ii) Non-Transient Non-Community water system - 120 points; and

(iii) Non-Community water system - 100 points.

(b) Not Approved - In order for a public water system to receive a Not Approved rating the accumulation of points for the water system must exceed the totals listed above.

(c) Corrective Action - In order to qualify for a Corrective Action rating the public water system must submit the following:

(i) A written agreement to the Director stating a willingness to comply with the requirements set forth in the Rules; and,

(ii) A compliance schedule and time table agreed upon by the Director outlining the necessary construction or changes to correct any physical deficiencies or monitoring failures; and,

(iii) Proof of the financial ability of the water system or that the financial arrangements are in place to correct the water system deficiencies.

(iv) The Corrective Action rating shall continue until the total project is completed or until a suitable construction inspection or sanitary survey is conducted to determine the effectiveness of the improvements or the accumulation of points drops below the threshold for a not approved rating whichever is later.

(4) The water system point accumulation shall be adjusted on a quarterly basis or as current information is available to the Director. The appropriate water system rating shall then be adjusted to reflect the current point total.

(5) The Director may at any time rate a water system Not Approved, if an immediate threat to public health exists. This rating shall remain in place until such time as the threat is alleviated and the cause is corrected.

(6) Any water system may appeal its assigned rating or assessed points as provided in

R309-400-5. Quality, Monitoring and Public Notification Violations.

(1) Total Coliform Rule:

All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5(6); or the monitoring requirements in R309-210-5; and the associated public notification requirements in R309-220. The bacteriological points assessed shall be updated on a monthly basis with the total number of points reflecting the most recent twelve month period or the most recent 4 quarters for those water systems that collect bacteriological samples quarterly, unless otherwise noted.

- (a) For each major bacteriological routine monitoring violation, 35 points shall be assessed. For each failure to perform the associated public notification 5 points shall be assessed.
- (b) For each minor bacteriological routine monitoring violation, 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.
- (c) For each major bacteriological repeat monitoring violation, 40 points shall be assessed. For each failure to perform the associated public notification 5 points shall be assessed.
- (d) For each minor bacteriological repeat monitoring violation, 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.
- (e) For each additional monitoring violation (R309-210-5(2)(e)), 10 points shall be assessed. For each failure to perform the associated public notification 2 points shall be assessed.
- (f) For each non-acute bacteriological MCL violation (R309-200-5(6)(a)), 40 points shall be assessed. For each failure to perform the associated public notification 10 points shall be assessed.
- (g) For each acute bacteriological MCL violation (R309-200-5(6)(b)), 50 points shall be assessed. For each failure to perform the associated public notification 10 points shall be assessed.

(2) Ground Water Rule:

All points assessed to public water systems via this subsection are based on violations of the standards in R309-215-16. Points assessed for any significant deficiency shall be deleted as the deficiencies are corrected and are reported to the Director. The bacteriological points assessed shall be updated on a monthly basis with the total number of points reflecting the most recent 12-month period or the most recent four quarters for those water systems that collect bacteriological samples quarterly, unless otherwise noted.

(a) For failure to collect triggered source samples in violation of R309-215-16(2)(a)(i)(A) and (a)(i)(B), 40 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(b) For failure to collect assessment source samples in violation of R309-215-16(2)(b)(i), 5 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(c) For failure to correct a significant deficiency in violation of R309-215-16(4)(a)(i) and (ii), R309-215-16(4)(c) or R309-215-16(4)(d), 35 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(d) For an *Escherichia coli* in violation of R309-215-16(4)(b)(i) and (ii), 40 points shall be assessed. For each failure to perform the associated public notification, 2 points shall be assessed.

(3) Chemical:

All points assessed to public water systems via this subsection are based on violations of the quality standards in R309-200-5; or the monitoring requirements in R309-205, 210 and 215; and the associated public notification requirements in R309-220. The chemical assessments shall be updated on a quarterly basis with the total number of points reflecting the most recent compliance period unless otherwise specified. Points for any chemical MCL violation shall remain on record until the quality issue is resolved. Points for any monitoring violation shall be deleted as the required chemical samples are taken and the analytical results are reported to the Director.

(a) Inorganic and Metal Contaminants:

(i) For each major chemical monitoring violation for inorganic and metal contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for inorganic and metal contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for inorganic and metal contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(b) Sulfate (for non-community water systems only):

(i) For each major chemical monitoring violation for sulfate, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for sulfate, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for sulfate, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(c) Radiologic Contaminants:

(i) For each major chemical monitoring violation for radiological contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for radiological contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for radiological contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(d) Asbestos Contaminants:

(i) For each major chemical monitoring violation for source water or distribution system asbestos, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for source water or distribution system asbestos, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) For each MCL exceedance for source water or distribution system asbestos, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(e) Nitrate:

- (i) For each routine chemical monitoring violation for nitrate, 50 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.
- (ii) For each MCL exceedance of nitrate, 60 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(f) Nitrite:

- (i) For each routine chemical monitoring violation for nitrite, 35 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.
- (ii) For each MCL exceedance of nitrite, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(g) Volatile Organic Chemicals:

- (i) For each major chemical monitoring violation for volatile organic chemical contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.
- (ii) For each minor chemical monitoring violation for volatile organic chemical contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.
- (iii) For each MCL exceedance for volatile organic chemical contaminants, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(h) Pesticides/PCBs/SOCs

- (i) For each major chemical monitoring violation for pesticide/PCB/SOC contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.
- (ii) For each minor chemical monitoring violation for pesticide/PCB/SOC contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.
- (iii) For each MCL exceedance for pesticide/PCB/SOC contaminants, 30 points shall be assessed. For each failure to perform the associated public

notification, 5 points shall be assessed.

(i) Disinfection Byproducts:

(i) Total Trihalomethanes:

(A) For each routine chemical monitoring violation for total trihalomethanes, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for total trihalomethanes, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) Haloacetic Acids (HAA5):

(A) For each routine chemical monitoring violation for HAA5, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for HAA5, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iii) Bromate:

(A) For each routine chemical monitoring violation for bromate, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for bromate, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iv) Chlorite:

(A) For each routine chemical monitoring violation for chlorite, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chlorite, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(j) Disinfectant Residuals:

(i) Chlorine:

(A) For each routine chemical monitoring violation for chlorine, 10 points shall be assessed. R309-210-8(3)(a). For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chlorine, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(C) For a disinfected system that does not maintain a trace residual at all points of the distribution system, 2 points shall be assessed. R309-105-10(1) and R309-200-5(7).

(D) For a disinfected system that lacks an adequate number of disinfection residual sample sites, 2 points shall be assessed. R309-210-8(3)(a)(i)(z15).

(ii) Chloramines:

(A) For each routine chemical monitoring violation for chloramines, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each MCL exceedance for chloramines, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(iii) Chlorine Dioxide:

(A) For each routine monitoring violation for chlorine dioxide, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(B) For each non-acute chlorine dioxide MCL violation, 30 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(C) For each acute chlorine dioxide MCL violation, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(iv) Ground Water Rule, where a water system has received a 4-Log exemption from triggered source water monitoring:

(A) For a ground water treatment facility serving greater than 3300

population lacking equipment to measure chlorine residuals continuously entering the distribution system, 20 points shall be assessed. R309-215-10(1).

(B) For a ground water system serving greater than 3300 people failing to continuously monitor the residual disinfectant concentrations, 10 points shall be assessed. R309-215-16(3)(b)(iii)(A)(I).

(C) For a ground water system serving less than 3300 people failing to collect a daily grab sample during peak demand to monitor the residual disinfectant concentrations, 10 points shall be assessed. R309-215-16(3)(b)(iii)(A)(II).

(D) For a ground water system that during the past year, the disinfection process was not operated uninterrupted while water was being produced, points will be assessed based on monthly and quarterly treatment reports. R309-200-5(7).

(E) For a ground water system that is required to provide continuous disinfection but fails to do so, 10 points shall be assessed for each month the failure continues. R309-520-6(1).

(k) Lead and Copper:

(i) For each major chemical monitoring violation for lead and copper contaminants, 20 points shall be assessed. For each failure to perform the associated public notification, 3 points shall be assessed.

(ii) For each minor chemical monitoring violation for lead and copper contaminants, 10 points shall be assessed. For each failure to perform the associated public notification, 1 point shall be assessed.

(iii) A system that fails to install, by the designated deadline, optimal corrosion control if the lead or copper action level has been exceeded shall be assessed 35 points. For each failure to perform the associated public notification, 10 point shall be assessed.

(iv) A system that fails to install source water treatment if the source waters exceed the lead or copper action level shall be assessed 35 points. For each failure to perform the associated public notification, 10 points shall be assessed.

(v) A system that fails to complete public notification/education if the lead/copper action levels have been exceeded shall be assessed 10 points for each calendar quarter that the system fails to provide public

notification/education.

(vi) A system that still exceeds the lead action level and is not on schedule for lead line replacement shall be assessed 5 points annually. For each failure to perform the associated public notification, 2 point shall be assessed.

(vii) A system that fails to notify its customers of their lead and copper sample results, 5 points shall be assessed.

(viii) A system that fails to send the lead and copper certification notice to the Division, 5 points shall be assessed.

(l) Groundwater Turbidity:

(i) For each monitoring violation for turbidity, 35 points shall be assessed. For each failure to perform the associated public notification, 5 points shall be assessed.

(ii) For each confirmed MCL exceedance of turbidity, 50 points shall be assessed. For each failure to perform the associated public notification, 10 points shall be assessed.

(m) Surface Water Treatment:

(i) For water systems having sources, which are classified as under direct influence from surface water and which fail to abandon, retrofit or provide conventional complete treatment or its equivalent within 18 months of notification shall be assessed 150 points. For the associated failure to perform public notification 10 points shall be assessed. The points shall be assessed as the failure occurs and shall remain on record until adequate treatment is provided or the source is physically disconnected.

(ii) Quality and Monitoring: The surface water treatment assessments shall be updated on a monthly basis with the total number of points reflecting the most recent 12-month period.

(A) Turbidity:

(I) For each turbidity exceedance that requires tier 1 notification under R309-220-5(1)(e) or (f), 50 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(II) For each turbidity exceedance that requires tier 2 notification under R309-220-5(1)(e) or (f), 35 points shall be

assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(III) For each month where the percentage of turbidity interpretations meeting the treatment plant limit is less than 95 percent, 25 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(IV) For any period of time that exceeds 4 hours where the system fails to continuously measure (or perform grab samples) the combined filter effluent turbidity, 50 points shall be assessed. For the associated failure to perform public notification, 10 points shall be assessed.

(V) For a water system whose failure to repair continuous turbidity monitoring equipment within 5 working days, 50 points shall be assessed.

(B) Disinfection:

(I) For each instance where the disinfectant level in water entering the distribution system is less than 0.2 milligrams per liter for more than 4 hours, 25 points shall be assessed. For the associated failure to perform public notification, 5 points shall be assessed.

(II) For each instance where there is insufficient disinfectant contact time, 35 points shall be assessed. For the associated failure to perform public notification, 5 points shall be assessed.

(iii) Treatment Process Control:

(A) For each instance a treatment facility exceeds the assigned filter rates, 30 points shall be assessed.

(B) For each month a water system fails to verify calibration of the plant turbidimeters, 5 points shall be assessed.

(C) For each month a water system fails to submit a water treatment plant report, 50 points shall be assessed.

R309-400-6. Physical Facilities.

All points assessed to public water systems via this subsection are based upon violation of R309-500 through R309-705 unless otherwise noted. These points shall be assessed and updated upon notification of the Director and shall remain until the violation or deficiency no longer exists.

(1) New Source Approval:

- (a) Use of an unapproved source shall be assessed 200 points.

(2) Surface Water Diversion Structures and Impoundments:

- (a) For each surface water intake structure that does not allow for withdrawal of water from more than one level if quality significantly varies with depth, 2 points shall be assessed. R309-515-5(5)(a).
- (b) Where diversion facilities are not capable of keeping large quantities of fish or debris from entering the intake, 2 points shall be assessed. R309-515-5(5)(e).
- (c) Where impoundment reservoirs have not had brush and trees removed to the high water level, 2 points shall be assessed. R309-515-5(6)(a).
- (d) Where reservoir watershed management has not provided adequate precautions to limit nutrient loading, 10 points shall be assessed. R309-515-5(6)(d).

(3) Well Sources

- (a) For each well that is not equipped with a sanitary seal, or has any unsealed opening into the well casing, 50 points shall be assessed. R309-515-6(6)(i).
- (b) For each well that does not utilize food grade mineral oil for pump lubrication, 25 points shall be assessed. R309-515-8(2).
- (c) For each well casing that does not terminate at least 12 inches above the well house floor, 18 inches above the final ground surface, or shows evidence of being subject to flooding, 20 points shall be assessed. R309-515-6(6)(b)(vi) and R309-515-6(13)(a) and (d).
- (d) For each well fitted with a pitless adaptor that does not maintain a water tight seal throughout, 50 points shall be assessed. R309-515-6(12)(c)(x).
- (e) For each wellhead that is not properly secured to protect the quality of the well water, 20 points shall be assessed. R309-515-6(13)(f).
- (f) For each well that is equipped with a pump to waste line that does not discharge

with a minimum of 12-inch clearance to the flood rim, 20 points shall be assessed. R309-515-6(12)(d)(ix).

(g) For each well that is equipped with a pump to waste line without a downturned discharge end covered with a No. 4 mesh screen, 5 points shall be assessed. R309-515-6(12)(d)(ix).

(h) For each well that is equipped with a pump to waste line that discharges to a receptacle without local authorization, 2 points shall be assessed.

(i) For each well that does not have a means to permit periodic measurement of water levels, 2 points shall be assessed. R309-515-6(12)(e)(i) and (ii).

(j) For each well casing vent that is not covered with a No. 14 or finer mesh screen, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b).

(k) For each well casing vent that is not downturned, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b). Also Division of Water Rights Rule R655-4-11.7.11.

(l) For each well casing vent that does not have adequate clearance to prevent the contaminants from entering the well, 2 points shall be assessed. R309-515-6(12)(d)(iii) and R309-550-6(6)(b).

(m) For each well (excluding the naturally flowing wells) that has discharge piping that is not equipped with 1) a smooth nosed sampling tap 2) check valve 3) pressure gauge 4) means of measuring flow, and 5) shut-off valve, 1 point shall be assessed for each component not present. R309-515-6(12)(d)(iv).

(n) For each well that pumps directly into a distribution system and does not have a means to release trapped air from the discharge piping (for example, release air through an air release vacuum relief valve, through a pump to waste line or pumps directly to a tank), 5 points shall be assessed. R309-515-6(12)(d)(v).

(o) For each well house that is not at least 6 inches above the final ground level, is not sloped to drain, or shows evidence of being subject to flooding, 5 points shall be assessed. R309-515-6(13)(b).

(p) For each well that has a cross connection present in the discharge piping, 20 points shall be assessed. R309-105-12(1) and R309-515-6(12)(d)(iii).

(q) For each well with an air vacuum relief valve on the well discharge piping that is not screened, 2 points shall be assessed. R309-515-6(12)(d)(v).

(r) For each well with an air vacuum relief valve on the well discharge piping that is not downturned, 2 points shall be assessed. R309-515-6(12)(d)(v).

(s) For each well with an air vacuum relief valve on the well discharging piping that does not have a 6-inch clearance to prevent contaminants from entering the piping, 2 points shall be assessed. R309-515-6(12)(d)(v).

(t) For each well that has rotating and electrical equipment that is not provided with protective guards, 2 points shall be assessed.

(4) Spring Sources:

(a) For each spring source that allows surface water to stand or pond upon the spring collection area (within 50 feet from collection devices), 10 or 20 points shall be assessed. The number of points shall be based upon the size and extent of the ponding; the possible source (rainfall or incomplete collection); or the presence of moss or other indicators of long term presence of standing water. R309-515-7(7)(i).

(b) For each spring area that does not have a minimum of ten feet of relative impervious soil or an acceptable alternate design with liner, or the spring collection area shows evidence of damaged liner or impervious soil cover, 10 points shall be assessed. R309-515-7(7)(a) and (b).

(c) For each spring area that has deep-rooted vegetation within the fenced collection area, 10 points shall be assessed. R309-515-7(7)(f).

(d) For each spring area that has deep rooted vegetation interfering with the spring collection, 10 points shall be assessed. R309-515-7(7)(f).

(e) For each spring with a spring collection/junction box that does not have a proper shoebox lid, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(2).

(f) For each spring with a spring collection/junction box that does not have a proper gasket on the lid, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(2).

(g) For each spring with a spring collection/junction box that lacks an adequate air vent, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-15.

(h) For each spring with a spring collection/junction box with a vent that is not screened with No. 14 mesh screen, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15.

(i) For each spring with a spring collection/junction box with a vent that is not down-turned or inverted, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15(1).

- (j) For each spring with a spring collection/junction box with a vent that does not have sufficient clearance to prevent ice blockage, or is not at least 24 inches above the earthen cover, 2 points shall be assessed. R309-515-7(7)(d) and R309-545-15(2).
- (k) For each spring with a spring collection/junction box that lacks a raised access entry, at least 4 inches above the spring box or 18 inches above the earthen cover, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-14(1).
- (l) For each spring with a spring collection/junction box that is not secured against unauthorized access, 20 points shall be assessed. R309-515-7(7)(d) and R309-545-14(3).
- (m) For each spring collection area without a proper fence, 10 points shall be assessed. R309-515-7(7)(e).
- (n) For each spring collection area that does not have a diversion channel, or berm capable of diverting surface water away from the collection area, 5 points shall be assessed. R309-515-7(7)(g).
- (o) For each spring system that does not have a permanent flow measuring device, 5 points shall be assessed. R309-515-7(7)(h).
- (p) For each spring area with an overflow or a combined overflow/drain discharge that is not screened with a No. 4 mesh screen, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-13.
- (q) For each spring collection/junction box overflow that does not have a freefall of 12 to 24 inches between the bottom of the discharge pipe and the surrounding ground, 5 points shall be assessed. R309-515-7(7)(d) and R309-545-13.
- (r) For each spring collection/junction box that has any unsealed opening(s) resulting in public health risk, 50 points shall be assessed. R309-515-7(7)(d) and R309-545-9(1).

(5) Pump Stations.

- (a) For a pumping facility that does not have a standard pressure gauge on the discharge line, 1 point shall be assessed. R309-540-5(6)(c)(i).
- (b) For a pumping facility building without adequate drainage or showing evidence of flooding, 5 points shall be assessed. R309-540-5(2)(a)(v) and (vi).
- (c) For a pumping facility where the discharge line from the air release valve is not screened with number 14 non-corrodible mesh screen, 2 points shall be assessed.

R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(d) For an air release valve located within a building, if the discharge line terminates less than six inches above the floor, 2 points shall be assessed. R309-515-6(12)(d)(v) and R309-540-5(6)(b)(ii).

(e) For an air release valve located in a chamber, if the air release valve discharge piping terminates less than 12 inches above grade, or less than one foot above the top of the pipe where the chamber is not subject to flooding, 10 points shall be assessed. R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(f) For a pumping facility where the discharge line from the air release valve is not down-turned, 2 points shall be assessed. R309-540-5(6)(b)(ii) and R309-550-6(6)(b).

(g) For a pumping facility where there is inadequate heating, lighting or ventilation, 5 points shall be assessed. R309-540-5(2)(e), (f) and (g).

(h) For a pumping facility where there are cross connections present, 20 points shall be assessed. R309-105-12(1).

(i) For an inline booster pumping facility designed to provide pressure directly to the distribution system, which does not have at least two pumping units such that with any one pump out of service the remaining pump or pumps are capable of meeting the peak day demand of the specific portion of the system served, 20 points shall be assessed. R309-540-5(4)(b).

(j) For a pumping facility which does not have protective guards on rotating and electrical equipment, 2 points shall be assessed. R309-525-21.

(k) For a pumping facility which is not secured against unauthorized access shall be assessed, 5 points. R309-540-5(1)(a)(v).

(6) Hydropneumatic pressure tanks.

(a) For diaphragm or air tanks located below ground without adequate provisions for drainage, maintenance and flood protection, 10 points shall be assessed. R309-540-6(2).

(b) For a pressure tank with a pump cycle that cycles more frequently than once every 4 minutes, 5 points shall be assessed. R309-540-6(5).

(7) Storage:

- (a) A water system with uncovered finished water storage shall immediately be assessed a rating of not approved, 200 points shall be assessed. R309-545-9(1) and (2).
- (b) For each storage tank roof showing evidence of water ponding with deterioration, 10 points shall be assessed. R309-545-9(4).
- (c) For each storage tank that does not have an access to the interior for cleaning and maintenance, 9 points shall be assessed. R309-545-14.
- (d) For each storage tank access that does not have a shoebox type lid with a minimum of a 2-inch overlap, 3 points shall be assessed. R309-545-14(2).
- (e) For each storage tank access that lacks a proper gasket between the lid and frame, 3 points shall be assessed. R309-545-14(2).
- (f) For each storage tank access that lacks a minimum rise of 4 inches above the tank roof or a minimum of 18 inches above an earthen cover, 3 points shall be assessed. R309-545-14(1).
- (g) For each storage tank that is not vented, 6 points shall be assessed. R309-545-15.
- (h) For each finished water storage tank vent that is not downturned or covered from rain and dust, 2 points shall be assessed. R309-545-15(1).
- (i) For each storage tank vent that does not terminate a minimum of 24 inches above the surface of the storage tank roof if the tank is a buried structure, 2 points shall be assessed. R309-545-15(2).
- (j) For each storage tank vent that is not screened with number 14 non-corrodible mesh screen, 2 points shall be assessed. R309-545-15(4).
- (k) For each storage tank that lacks an overflow, 15 points shall be assessed. R309-545-13.
- (l) For each storage tank overflow that does not terminated 12 to 24 inches above the ground, 5 points shall be assessed. R309-545-13.
- (m) For each storage tank overflow that is not screened with number 4 non-corrodible mesh screen, 5 points shall be assessed. R309-545-13(3).
- (n) For each storage tank overflow that is connected to a sewer system without an adequate air gap, 5 points shall be assessed. R309-545-13(5).
- (o) For each storage tank with a drain that does not discharge through a physical

airgap of at least 2 pipe diameters, 5 points shall be assessed. R309-545-10(1).

(p) For each storage tank with inadequate or improper means of site drainage or showing evidence of standing surface water within 50 feet of the tank, 5 points shall be assessed. R309-545-7(4).

(q) For each storage tank with any unsealed roof or wall penetrations, 50 points shall be assessed. R309-545-9(2).

(r) For each storage tank where the roof and sidewalls show signs of deterioration, 10 to 50 points shall be assessed based upon the size and number of cracks, the loss of structural integrity, and the access of contamination to the drinking water. R309-545-9(1).

(s) For each storage tank without a safe access (such as ladders for tanks in excess of 20 feet, ladder guards, or railings) or safely located entrance hatches, 2 points shall be assessed. R309-545-19(1), (2) and (3).

(t) For each storage tank with internal coatings not in compliance with ANSI/NSF standard 61, 30 points shall be assessed. R309-545-11.

(u) For a storage facility that is not secured against unauthorized access, 20 points shall be assessed. R309-545-14(3).

(8) Distribution System:

(a) A water system that fails to provide the minimum water pressures as required in R309-105-9 at all times and at all locations within the distribution system, 50 points shall be assessed. R309-105-9 and R309-550-5(1).

(b) A water system using pipe and materials not meeting the ANSI/NSF 61 standard shall be assessed 30 points. R309-550-6.

(c) A water system with pipelines installed without adequate separation distance from the sanitary sewer lines shall be assessed 30 points. R309-550-7.

(d) A new water system constructed after January 1, 2007 or an existing water system modification without adequate pressure as defined in R309-105-9(2) shall be assessed 50 points.

(e) A water system which has a distribution line that crosses under a surface water body without adequate protection as outlined in R309-550-8(8)(b) shall be assessed 50 points.

(f) A water system which has distribution system flushing devices, blow-offs or air

relief valves, which are directly connected to a sewer or do not have a proper air gap, shall be assessed 20 points. R309-550-6 and R309-550-9.

(g) For a water system that does not properly follow the AWWA disinfection standards 10 points shall be assessed. R309-550-8(10).

(h) For a water system that is required by the local fire authority to provide fire protection or has fire hydrants connected with water mains less than 8 inches in diameter, 5 points shall be assessed. These points will only be assessed for water mains installed after 1995. R309-550-5(4) and (5).

(i) For each air relief valve vent piping, which is not screened with a No. 14 mesh and downturned, 10 points shall be assessed. R309-550-6(6)(b).

(j) For an air release valve located in a chamber, if the air release valve discharge piping terminates less than 12 inches above grade or less than one foot above the top of the pipe where the chamber is not subject to flooding, 10 points shall be assessed. R309-550-6(6)(b).

(k) For each air relief valve located in a chamber without a drain or adequate sump, or showing evidence of being subject to flooding, 30 points shall be assessed. R309-550-7.

(l) For each air vacuum release valve chamber that is flooded at the time of inspection, 50 points shall be assessed.

(m) For an unprotected cross-connection in the distribution system as required in R309-550-9, 50 points shall be assessed.

(9) Quantity requirements

(a) A water system without sufficient source capacity to meet peak day and average yearly flow requirements, from 10 to 50 points shall be assessed. The number of points shall be based upon the severity of the shortage, including the number of times and duration of water outages or low pressure. R309-510-7.

(b) A water system without sufficient storage capacity to meet average day demand, plus the required fire suppression volume if applicable, 10 to 50 points shall be assessed. The number of points shall be based upon the severity of the shortage including the number of times and duration of water outages. R309-510-8.

R309-400-7. Treatment Processes.

(1) General Treatment.

- (a) For a treatment facility without anti-siphon control to assure that liquid chemical solutions cannot be siphoned through solution feeders into the process units, 2 points shall be assessed. R309-525-11(9)(b)(ii) and (c).
- (b) For a treatment facility with a process tank that is not properly labeled to designate the chemical contained, 2 points shall be assessed. R309-525-11(8)(c)(vii).
- (c) For a treatment facility with chemicals not stored in covered or unopened shipping containers, unless the chemical is transferred into a covered storage unit, 2 points shall be assessed. R309-525-11(6)(a)(iii).
- (d) For a treatment facility with no cross connection control provided to assure that no direct connections exist between any sewer and the drain or overflow from the feeder, solution chamber, or tank by providing that all pipes terminate at least six inches or two pipe diameters, whichever is greater, above the overflow rim of a receiving sump, conduit, or waste receptacle, 10 points shall be assessed. R309-525-11(9)(b)(iii).
- (e) For a treatment facility with no spare parts available for all feeders to replace parts that are subject to wear and damage, 2 points shall be assessed. R309-525-11(7)(b)(v).
- (f) For a treatment facility where incompatible chemicals are fed, stored or handled together, 2 points shall be assessed. R309-525-11(7)(a)(iv).
- (g) For a treatment facility where daily operating records do not reflect chemical dosages and total quantities used, 2 points shall be assessed. R309-105-14(3).
- (h) For a water system that fails to maintain and properly calibrate all instrumentation needed to verify the treatment process, 2 points shall be assessed. R309-525-25(4).
- (i) For a treatment facility without the means to accurately measure the quantities of chemicals used, 20 points shall be assessed. R309-525-11(7)(a)(i) and R309-525-11(6)(b)(iii).
- (j) A water system that does not keep acids and caustics in closed corrosion-resistant shipping containers or storage units, 2 points shall be assessed. R309-525-11(11)(a)(i).
- (k) For a treatment facility that does not have the vent hose from the feeder to discharge to the outside atmosphere above grade or have the end covered with #14 non-corrodible mesh screen, 2 points shall be assessed. R309-520-7(2)(f).

- (l) For a treatment facility that uses any chemical that is added to water being treated for use in a public water system for human consumption that does not comply with ANSI/NSF Standard 60, 25 points shall be assessed. R309-525-11(5).
- (m) For a treatment facility that does not have a finished water sampling tap(s), 2 points shall be assessed. R309-525-18.
- (n) For a treatment facility that is not performing adequate process control testing consistent with the specific treatment process, 30 points shall be assessed. R309-525-19.
- (o) For a surface water treatment facility that does not have continuous residual disinfection equipment to measure the residual in mg/L entering the distribution system, 20 points shall be assessed. R309-215-10(1).
- (p) For a treatment facility without provisions for disposing of empty bags, drums or barrels by an acceptable procedure that will minimize operator exposure to dusts, 2 points shall be assessed. R309-525-11(6)(b) and (c).
- (q) For a treatment facility that does not provide cross connection control on the make-up waterlines discharging to solution tanks, 10 points shall be assessed. R309-525-11(9)(b)(i).
- (r) For a treatment facility with solution tank overflow pipes that do not have a free fall discharge or are not located where noticeable, 2 points shall be assessed. R309-525-11(8)(b)(v).
- (s) For a treatment facility without adequate spill containment provisions, 2 points shall be assessed. R309-525-11(6)(a)(iv)(B).
- (t) For a treatment facility with acid storage tanks that are not vented to the outside atmosphere with separate screened vents, 2 points shall be assessed. R309-525-11(8)(b)(vi).
- (u) For a treatment facility without provisions for the proper disposal of water treatment plant waste (such as sanitary, laboratory, sludge, and filter backwash water), 5 points shall be assessed. R309-525-23.
- (v) For a treatment facility where cross connection control is not provided on the feed lines to the solution tanks, 10 points shall be assessed. R309-525-11(9)(b) and (c).
- (w) For a treatment facility that does not have a means to measure water flow rate, 10 points shall be assessed.

- (x) For a surface water treatment facility where the piping is not labeled and color coded to identify the direction of flow and the contained liquid, 2 points shall be assessed. R309-525-8.
- (y) Treatment facilities not secured against unauthorized access, 20 points shall be assessed.
- (z) For a treatment facility using expired chemical reagents for process control, 5 points shall be assessed.
- (aa) For a treatment facility with no access to lab or test kits for process testing, 2 points shall be assessed. R309-525-17(1).
- (bb) For a treatment facility lacking cross connection control for the in-plant water supply, 10 points shall be assessed. R309-525-11(9)(b)

(2) Disinfection.

(a) General.

- (i) For a chlorination facility which is not heated, lighted or ventilated as necessary to assure proper operation or the equipment and serviceability, 2 points shall be assessed. R309-520-7(1)(l).
- (ii) For a disinfection facility without cross connection control on the solution feeders into the process units as required in R309-525-11(9)(c), 10 points shall be assessed. R309-525-11(9)(b)(ii).
- (iii) For a chlorination facility where there is no standby disinfection equipment of sufficient capacity available to replace the largest unit, 10 points shall be assessed. R309-520-7(1)(k).
- (iv) For a disinfection facility where the correct reagent is not used for testing free disinfectant residual, 2 points shall be assessed.
- (v) For a treatment facility where the pre- and post-chlorination processes are not independent of each other, to prevent possible siphoning of partially treated water into the clear well, 50 points shall be assessed. R309-525-11(9)(b)(iv).
- (vi) For a disinfection facility where chemical solution tanks are not kept covered, 2 points shall be assessed. R309-525-11(8)(b)(iii).
- (vii) For a disinfection facility without disinfectant residual test equipment, 2 points shall be assessed. R309-520-7(1)(j).

(viii) For a disinfection facility where there is no means to measure the volume of water treated, 2 points shall be assessed. R309-520-7(1)(i).

(b) Gas chlorination.

(i) For a gas chlorination facility without an automatic switch over of chlorine cylinders to assure continuous disinfection, 2 points shall be assessed. R309-520-7(2)(a).

(ii) For a gas chlorination facility without scales for weighing cylinders, 2 points shall be assessed. R309-520-7(2)(k).

(iii) For a gas chlorination facility without a leak repair kit, 15 points shall be assessed. R309-520-7(2)(p).

(iv) For a gas chlorination facility without respiratory equipment available and stored at a convenient location, 5 points shall be assessed. R309-520-7(2)(o).

(v) For a gas chlorination facility housed in a water treatment plant building where the chlorine gas feed and storage area is not enclosed and separated from other operating areas, 2 points shall be assessed. R309-520-7(2)(h).

(vi) For a gas chlorination facility where the chlorination equipment rooms are not vented such that the ventilating fan(s) take suction near the floor, as far as practical from the door and air inlet, with the point of discharge so located as not to contaminate air inlets of any rooms or structures, 5 points shall be assessed. R309-520-7(2)(e)(ii).

(vii) For a gas chlorination facility where the chlorination equipment rooms are not vented such that air inlets are through louvers near the ceiling, 2 points shall be assessed. R309-520-7(2)(e)(iii).

(viii) For a gas chlorination facility where the chlorination equipment rooms are not vented such that separate switches for the fans and lights are outside of the chlorine room, at the entrance to the chlorination equipment room and protected from vandalism, 2 points shall be assessed. R309-520-7(2)(e)(v).

(ix) For a gas chlorination facility where the vent hose from the feeder to discharge to the outside atmosphere is not above grade or does not have the end covered with #14 non-corrodible mesh screen, 2 points shall be assessed. R309-520-7(2)(f).

(x) For a gas chlorination facility without a bottle of ammonium hydroxide (56%) available for leak detection, 2 points shall be assessed. R309-520-

7(2)(p).

(xi) For a gas chlorination facility where full and empty cylinders of chlorine gas are not restrained in position to prevent upset, 2 points shall be assessed. R309-520-7(2)(i)(ii).

(xii) For a gas chlorination facility with full and empty cylinders of chlorine gas stored in areas in direct sunlight or exposed to excessive heat, 2 points shall be assessed. R309-520-7(2)(i)(iii).

(xiii) For a gas chlorination facility in a water treatment plant building where the chlorine room is constructed in a manner that any openings between the chlorine room and the remainder of the plant are not sealed, 2 points shall be assessed. R309-520-7(2)(h)(ii).

(xiv) For a gas chlorination facility housed in a water treatment plant building that lacks outward-opening doors with panic bars, 2 points shall be assessed. R309-520-7(2)(h)(iii).

(xv) For a gas chlorination facility housed in a water treatment plant building with floor drains that do not discharge to the outside of the building and are not connected to other internal or external drain systems, 5 points shall be assessed. R309-520-7(2)(h)(iv).

(xvi) For a gas chlorination facility without a means of chlorine leak detection, such as a bottle of ammonia hydroxide solution or chlorine leak detection equipment, 15 points shall be assessed. R309-520-7(2)(p).

(c) Chlorine dioxide.

(i) For a chlorine dioxide disinfection facility where provisions are not made for proper storage of sodium chlorite to eliminate any danger of explosion 2 points shall be assessed. R309-520-10(3)(b) and R309-525-11(11)(b)(i).

(ii) For a chlorine dioxide disinfection facility where sodium chlorite is not stored by itself in a separate room and away from organic materials that would react violently with sodium chlorite, 2 points shall be assessed. R309-520-10(5)(a) and R309-525-11(11) (b)(i)(A).

(iii) For a chlorine dioxide disinfection facility where sodium chlorite storage structures are not constructed of noncombustible materials, 2 points shall be assessed. R309-520-10(3)(b)(iv) and R309-525-11(11)(b)(i)(B).

(iv) For a chlorine dioxide disinfection facility where a sodium chlorite storage structure is not located in an area where a fire may occur, water

should be available to keep the sodium chlorite area sufficiently cool to prevent decomposition from heat and resultant potential explosive conditions. 2 points shall be assessed if this is not the case. R309-520-10(4)(d) and R309-525-11(11)(b)(i)(C).

(v) For a chlorine dioxide disinfection facility that stores combustible or reactive materials in the operating area, 2 points shall be assessed. R309-520-10(5)(a).

(vi) For a chlorine dioxide disinfection facility that does not store personal protective equipment nearby, 5 points shall be assessed. R309-520-10(5)(c)

(vii) For a chlorine dioxide disinfection facility that does not have an emergency eyewash and shower immediately outside the operating area, 2 points shall be assessed. R309-520-10(3)(b)(viii)

(viii) For a chlorine dioxide disinfection facility that lacks an emergency shutoff for flows to the chlorine dioxide generator, 2 points shall be assessed. R309-520-10(3)(b)(ix)

(ix) For a chlorine dioxide disinfection facility that lacks a distinguishable alarm triggered by an ambient air chlorine dioxide sensor, 2 points shall be assessed. R309-520-10(3)(b)(v)

(x) For a chlorine dioxide disinfection facility that lacks wash down water available in the operating area, 2 points shall be assessed. R309-520-10(3)(b)(xvi)

(xi) For a chlorine dioxide disinfection facility that does not maintain the temperature of the chlorine dioxide operating area between 60 and 100°F, 2 points shall be assessed. R309-520-10(5)(d)

(xii) For a chlorine dioxide disinfection facility that lacks an Operation and Maintenance Manual including safety and emergency response procedures, 2 points shall be assessed. R309-520-10(5)(f)

(d) Ultraviolet (UV)

(i) For a UV disinfection facility that lacks an operating procedure in place to handle UV lamp breakage, power supply interruption, response to alarms, 2 points shall be assessed. R309-520-8(4)(b)

(ii) For a UV disinfection facility that does not calibrate and operate UV intensity sensors per manufacturer's instruction, 2 points shall be assessed R309-520-8(4)

(iii) For a UV disinfection facility that does not use ANSI/NSF Standard 60 chemicals in the cleaning of the UV, 25 points shall be assessed. R309-520-8(3)(j)

(iv) For a UV disinfection facility that can't isolate the UV disinfection system or each UV reactor for maintenance, 2 points shall be assessed. R309-520-8(3)(g)

(v) For a UV disinfection facility that lacks a backup power source for the UV disinfection system, 2 points shall be assessed. R309-520-8(3)(l)

(vi) For a UV disinfection facility that lacks a redundant primary disinfection mechanism, 5 points shall be assessed. R309-520-8(3)(m)

(e) Ozone

(i) For an ozone disinfection facility without a minimum of two ozone aqueous residual analyzers, 2 points shall be assessed. R309-520-9(7)(c)

(ii) For an ozone disinfection facility using chemicals that do not meet ANSI/NSF Standard 60 quench the residual ozone, 25 points shall be assessed. R309-520-9(4)(h)

(iii) For an ozone disinfection facility lacking properly functioning ozone off-gas blowers from the contactor, 2 points shall be assessed. R309-520-9(5)(b)

(iv) For an ozone disinfection facility that lacks a system for treating the final off-gas from each ozone contactor, 2 points shall be assessed. R309-520-9(5)(a)

(v) For an ozone disinfection facility discharging an ozone concentration in the gas discharge exceeding 0.1 ppm by volume, 2 points shall be assessed. R309-520-9(5)(d)

(3) Fluoridation.

(a) General

(i) For a fluoridation facility that does not calculate fluoride concentrations, including chemical dosages and total water quantities daily, 2 points shall be assessed. R309-105-14(3).

(ii) For a fluoridation facility without a fail-safe device incorporated in the fluoride feed control system to prevent overfeeding fluoride, 30 points shall

be assessed. R309-535-5(3).

(iii) For a fluoridation facility that uses fluoride chemicals that do not conform to the applicable AWWA standards or with ANSI/NSF Standard 60, 25 points shall be assessed. R309-535-5.

(iv) For a fluoridation facility without scales, loss-of-weight recorders or liquid level indicators, as appropriate, 2 points shall be assessed. R309-535-5(2)(a).

(v) For a fluoridation facility without proper personal protective equipment as required in R309-525-11(10) for operators handling fluoride compounds, 10 points shall be assessed. R309-535-5(4).

(vi) For a fluoridation facility lacking a sampling location for measuring the final fluoride level, 2 points shall be assessed. R309-525-18.

(vii) For a fluoridation facility that does not have a means to measure the flow of water to be treated, 2 points shall be assessed. R309-535-5(2)(g).

(viii) For a fluoridation facility without fluoride testing equipment not properly verified or calibrated, 2 points shall be assessed. R309-525-25(4).

(ix) For a fluoride facility adding fluoride compound before lime-soda softening, 2 points shall be assessed. R309-535-5(2)(c).

(x) For a Fluoridation facility lacking cross connection control so that no direct connections exist between any sewer and a drain or overflow from the feeder, solution chamber or tank, 10 points shall be assessed. R309-525-11(9)(b)(iii).

(xi) For a fluoridation facility storing incompatible chemicals in the fluoride storage or injection areas, 10 points shall be assessed. R309-525-11(7)(a)(iv).

(xii) For a fluoridation facility lacking a floor drain to facilitate the washdown of floors, 2 points shall be assessed. R309-535-5(5)(b)

(b) Acid

(i) For a fluoridation facility without deluge showers and eye wash devices, 10 points shall be assessed. R309-535-5(4).

(ii) For a fluoridation facility lacking adequate spill containment provisions, 2 points shall be assessed R309-525-11(6)(a)(iv)(B).

(iii) For a fluoridation facility lacking a vent in the fluorosilicic acid storage units that vents to the atmosphere, 2 points shall be assessed. R309-525-11(8)(b)(vi).

(c) Dry

(i) For a fluoridation facility where the make-up water used for sodium fluoride dissolution is not treated to reduce hardness to less than 75 mg/l as calcium carbonate, 2 points shall be assessed. R309-535-5(2)(i).

(ii) For a fluoridation facility without a spring opposed diaphragm type anti-siphon device for all fluoride feed lines and dilution water lines, 10 points shall be assessed. R309-535-5(2)(f).

(iii) For a fluoridation facility with saturators that do not have a flow meter on the inlet or outlet line, 2 points shall be assessed. R309-535-5(2)(l).

(iv) For a fluoridation facility without an adequate level of fluoride crystals in the saturator, 2 points shall be assessed. R309-525-11(8)(b)(i).

(v) For a fluoridation facility without a NIOSH/MSHA certified dust respirator approved for fluoride dust removal as required in R309-525-11(10) for operators handling dry fluoride compounds, 10 points shall be assessed. R309-535-5(4).

(vi) For a fluoridation facility where an overflow from the day tank will not drain by gravity back into the bulk storage tank or a containment system, 10 points shall be assessed. R309-525-11(8)(c)(v).

(vii) For a fluoridation facility using the sodium fluoride dry chemical where the saturators are not of the up-flow type, 2 points shall be assessed. R309-535-5(2)(l).

(viii) For a fluoride facility where fluoride chemicals stored in uncovered or opened shipping containers and are stored inside a building on pallets, 2 points shall be assessed. R309-535-5(1).

(ix) For a fluoride feed pump that is not tied directly to the well pump or service pump, 30 points shall be assessed. R309-535-5(2)(k).

(x) For a fluoridation facility lacking a vent in the dry chemical storage areas that vents to the atmosphere outside the building, 2 points shall be assessed. R309-535-5(5)(a).

(xi) For a fluoridation facility using sodium fluoride dry chemical and lacking a hopper equipped with an exhaust fan and dust filter and under a

negative pressure during transfer of dry fluoride compounds, 10 points shall be assessed. R309-535-5(5)(a).

(xii) For a fluoridation facility that does not vent air from fluoride handling equipment through a dust filter to the outside atmosphere of the building for dust control during transfer of dry fluoride compounds, 10 points shall be assessed. R309-535-5(5)(a).

(xiii) For a fluoridation facility using sodium fluoride dry chemical and lacking a means of disposing of empty bags, drums or barrels handled in a manner that minimizes operators' exposure to fluoride dusts shall be assessed, 10 points. R309-535-5(5)(b).

(4) Filtration Treatment.

(a) For a filtration facility that does not have equipment for each individual filter to continuously monitor the effluent turbidity, 30 points shall be assessed.

(b) For a surface water filtration facility that does not have at least two filter units, each capable of meeting the plant design capacity, 20 points shall be assessed. R309-525-15(3).

(c) For a conventional surface water filtration facility that does not have the ability to filter to waste (to allow a filter to ripen before introduction finished water into the clearwell), 20 points shall be assessed.

(d) For a filtration facility where instrumentation and controls are inoperable, 2 points shall be assessed.

(e) For a filtration facility where a backwash tank is not provided with finished drinking water, 20 points shall be assessed. R309-525-15(7)(a)(ix).

(f) For a conventional surface water filtration facility where the backwash waste water is not settled prior to being recycled to the head of the treatment plant, 2 points shall be assessed. R309-525-15(7)(a).

(g) For a membrane filtration facility where automatic membrane integrity tests are not performed at least daily, 2 points shall be assessed. R309-530-8(3)(b).

(h) For a membrane filtration facility not using ANSI/NSF 60 approved chemicals, 25 points shall be assessed. R309-525-11(5)(b).

(i) For a membrane filtration facility lacking cross-connection control protection for the treatment process, 10 points shall be assessed.

(5) Ion Exchange

- (a) For an ion exchange facility without a depth of the exchange resin at least 3 feet, 2 points shall be assessed. R309-535-8(1)(b)(iii).
- (b) For an ion exchange facility using a salt for the brine solution not having an ANSI/NSF 60 certification, 25 points shall be assessed. R309-525-11(5)(b).
- (c) For an ion exchange facility make-up water inlet that lacks protection from back-siphonage, 2 points shall be assessed
- (d) For an ion exchange facility where the overflow discharge piping is not protected with a corrosion resistant screen or is not terminated with a downturned bend with adequate clearance to prevent cross connection, 10 points shall be assessed. R309-525-11(9)(b).
- (e) For an ion exchange facility that lacks a brine measuring tank or means of metering provided to obtain proper dilution, 2 points shall be assessed. R309-525-11(8)(b)(i).

(6) Sequestration

- (a) For a polyphosphate sequestration facility that uses chemicals not meeting ANSI/NSF 60 certification, 25 points shall be assessed. R309-535-11(5)(d).
- (b) For a sequestration facility using phosphate chemicals where total phosphate applied exceed 10 milligrams per liter as PO₄, 2 points shall be assessed. R309-535-11(5)(b).
- (c) For a sequestration facility that lacks sample taps located on each raw water source, each treatment unit influent and each treatment unit effluent, 2 points shall be assessed. R309-535-11(5)(d).
- (d) For a sequestration facility that lacks the testing equipment for accurately measuring the phosphate dosage, 2 points shall be assessed. R309-535-11(5).

R309-400-8. Operator Certification.

- (1) A water system that is required to have a certified operator and does not, 30 points shall be assessed.
- (2) A water system where the operator is not certified at the appropriate level, 10 points shall be assessed.

- (3) A grade 3 or 4 water system that does not have all direct responsible charge operators (as specified in R309-300-5(5)) certified at the level of the system, 5 to 15 points shall be assessed. The number of points shall be based on the percentage of time that the water system is operated by operators not certified at the required level.
- (4) A water system where the certified operator does not live within a one hour response time, 20 points shall be assessed.
- (5) A water system may be credited up to a maximum of 20 points, which shall remain on record for as long as the conditions apply. The following items are eligible for credit:
 - (a) A water system that is not required to have a certified operator and does shall be credited 10 points.
 - (b) A water system that has operators that are certified at a higher level than required shall be credited 10 points.
 - (c) A water system that has operators certified in other areas that are not required by that water system, such as treatment shall be credited 10 points.

R309-400-9. Cross Connection Control Program.

- (1) A water system, which does not have any of the below listed components of a cross connection control program in place, 50 points shall be assessed.
- (2) A water system, which only has some of the components of a cross connection control program in place, shall be assessed the following number of points:
 - (a) A water system which does not have local authority to enforce a cross connection control program (e.g., ordinance, bylaw or policy), 10 points shall be assessed.
 - (b) A water system that does not provided public education or awareness material or presentations on an annual basis, 10 points shall be assessed.
 - (c) A water system that does not have an operator with training in the area of cross connection control or backflow prevention, 10 points shall be assessed.
 - (d) A water system with no written records of cross connection control activities, such as, backflow assembly inventory and test history, 10 points shall be assessed.
 - (e) A water system that does not have on-going enforcement activities (hazard assessments and enforcement actions), 10 points shall be assessed.

R309-400-10. Drinking Water Source Protection.

Drinking water source protection (for ground water and surface water sources): Points shall be assessed for each source after a system fails to complete source protection requirements according to schedules or deadlines specified in R309-600 and R309-605, unless extensions have been requested from and granted by the Director. The points shall remain until such time as the violation or deficiency is corrected or resolved.

- (1) For a water system that has not appointed a designated person for source protection and notified the Division, 5 points shall be assessed.
- (2) For a water system that has not upgraded a Preliminary Evaluation Report to a Drinking Water Source Protection plan, 30 points shall be assessed.
- (3) For a water system that has not submitted an updated Drinking Water Source Protection plan, 10 points shall be assessed.
- (4) For a water system with any new (see R309-110) sources for which a Preliminary Evaluation Report has not been submitted, 150 points shall be assessed. These points shall be included with the points for an unapproved source, not added to them.
- (5) For a water system that has any existing (see R309-110) sources that have come into use for which a source protection plan has not been submitted, 30 points shall be assessed.
- (6) For a water system that has reconstructed or redeveloped a water source and has not submitted a revised source protection plan, 20 points shall be assessed.
- (7) For a water system that has a disapproved plan, update or Preliminary Evaluation Report, 20 points shall be assessed.

R309-400-11. Administrative Issues.

Points in this area shall be assessed at the time that the failure occurs or upon notification of the Director, and shall remain until the issue is resolved unless otherwise specified.

(1) Administrative Data -

- (a) A water system, that has not designated a person or organizational official responsible for the system including a current address and phone number, 10 points shall be assessed.
- (b) A water system project constructed without proper plan approval, 50 to 200 points shall be assessed based on an evaluation of the project which shall include the

structural or engineering integrity of the project; whether the plans and specifications were prepared and stamped by a licensed professional engineer; the adequacy of the materials used and the impact on the operation of the water system (good or bad).

(2) A water system with a current written Emergency Response Program

shall be credited 10 points that shall remain on record as long as the Program remains current.

(3) A water system with a written Financial Management Plan

including an appropriate rate structure, infra-structure replacement fund, and master plan shall be credited 10 points that shall remain on record as long as the Plan is current.

(4) Sampling Site Plans:

(a) A water system, which does not have an adequate bacteriological sampling site plan, 5 points shall be assessed.

(b) A water system, which does not have a lead/copper sampling site plan, 10 points shall be assessed.

(5) Customer Complaint:

(a) 25 to 100 points may be assessed for valid and documented customer complaints. The customer complaints include but are not limited to the following:

- (i) Turbidity;
- (ii) Pressure;
- (iii) Taste and Odor;
- (iv) Sickness (water suspected); and
- (v) Waterborne Disease Outbreak (R309-104-9).
- (vi) Periods of Water Outage

(b) The number of points shall be based upon the extent and documentation of the problem and the potential impact to public health. The documentation shall consist

of an investigation by Department of Environmental Quality, Department of Health or Local Health Department personnel and may include an epidemiological study linking the drinking water to reported outbreaks of illness where appropriate.

(c) In the case of a documented waterborne disease outbreak, the water system shall automatically be rated Not Approved for at least the duration of the threat to the quality of the drinking water and as long as it takes the water system to correct any deficiency that caused the outbreak.

(d) Points shall only be assessed once per issue and shall not be additive based on the number of calls per issue. These points shall be assessed and updated upon verification of the complaint by the Director and shall remain on record until the issue or deficiency no longer exists. Points may have already been assessed in other areas as appropriate.

(6) (a) The Director may issue directives

to a water system that include, but are not limited to the following:

- (i) Administrative Orders;
- (ii) Rule defined action;
- (iii) Rule defined compliance schedule;
- (iv) Variance/Exemption requirements;
- (v) Bilateral Compliance Agreement;
- (vi) Notice of Violation and Compliance Order; and
- (vii) Compliance Action/Enforcement Order.

(b) If the water system does not comply with the directive, the Director may assess 25 to 200 points to the water system. Points shall be assessed based upon the severity of the non-compliance, the threat to public health and the underlying basis for the original directive.

(7) Data Falsification –

The Director may assess a water system points for data falsification. The water system may be assessed 25 to 200 points for each occurrence based upon:

- (a) the severity of the falsification;
- (b) the threat to public health;

(c) the intent of the water system personnel; and,

(d) the type of falsification.

(i) Reports only good data

(ii) Doctored results from the laboratory

(iii) Non-valid sample

Data reported to the Director includes but is not limited to Water Treatment Plant Reports, Disinfection Reports, bacteriological and chemical analyses, and Annual Reports. This assessment of points shall be in addition to any other penalty provided by law.

(8) Water Hauling:

(a) For a community water system that is hauling water as a permanent method of culinary water distribution, 150 points shall be assessed. R309-550-10(1).

(b) For a non-community system that is hauling water as a permanent method of culinary water distribution without approval from the director, 150 points shall be assessed. R309-550-10(2).

(c) For a water system, which has been granted an exception to haul water, if any part of the water hauling guidelines is not followed, 50 points shall be assessed. R309-550-10.

R309-400-12. Reporting and Record Maintenance Issues.

Points may be assessed for failure to provide required reports to the Director by the reporting deadline. The points shall be assigned as the failure occurs and shall remain on record for a period of one year.

(1) Monthly Reports:

(a) For each failure to report the monthly water treatment plant report, 100 points shall be assessed.

(2) Quarterly Reports:

- (a) For each failure to report the quarterly disinfection report, 50 points shall be assessed.

(3) Annual and Other Reports:

- (a) A public water system that fails to submit water use data required by a state agency or fails to verify the accuracy of the data by including a certification by a certified operator or a professional engineer performing the duties of a certified operator shall be assessed 50 points.
- (b) Community water systems that fail to send a certification to the Division stating how the consumer confidence report was distributed to its customers as required in R309-225-7(3), 10 points shall be assessed.
- (c) Community water systems that fail to mail a copy of the consumer confidence report to the Division as required in R309-225-7(3), 10 points shall be assessed.
- (d) A public water system that fails to submit operational reports or other reports required by the Division shall be assessed 20 points.

KEY: drinking water, environmental protection, water system rating, penalties

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